BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFOR

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Order Instituting Rulemaking Regarding Policies, Procedures and Rules for Development of Distribution Resources Plans Pursuant to the Public Utilities Code Section 796	Rulemaking 14-08-013 (filed August 14, 2014)

PETRA'S REPLY COMMENTS ORDER INSTITUTING RULEMAKING REGARDING POLICIES, PROCEDURES AND RULES FOR DEVELOPMENT OF DISTRIBUTION RESOURCES PLANS

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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

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I. Introduction

On August 20, 2014, the Commission issued an Order Instituting Rulemaking ("OIR") in the above-captioned proceeding. Petra appreciates the opportunity to provide further comments.

Petra is a provider of intelligent technology solutions and systems that include distributed and pole-mounted solar, energy storage, and energy efficiency controls that can directly support the Commission's goal of minimizing overall system costs and maximize ratepayer benefit from investments in distributed resources. Petra's systems also benefit communities through leverage of their communications networks to support community-wide broadband access. Petra is committed to both renewable technology that lowers greenhouse gas emissions and also to innovation that supports grid health and resiliency at the distribution edge.

II. Comments of Petra

Petra encourages the Commission to adopt a dual track for developing a methodology for distribution system planning and enhancing distribution operations to reliably integrate distributed energy resources on a going-forward basis. While Petra appreciates that there are traditional ways to conduct distribution planning, these methodologies should be supplemented with new opportunities for meeting new grid resiliency challenges and related legislative, environmental, and demand side issues. Some of the current proposals do not appear to sufficiently consider the value of flexible and disbursed resources. Just as transmission system planning is supplemented with flexible real-time operations to create more capacity on the grid and enhance renewable integration, distribution system planning should likewise be moving in that direction. Incorporating more distributed and renewable energy resources into the grid makes it increasingly important to unleash the benefits of flexible and distributed resources. Properly done, this can add a level of robustness to grid operations while simultaneously enhancing the integration of all resources into the distribution system. With the understanding that there is a short timeline for an initial distribution system plan, Petra recommends opening a parallel path for considering ongoing distribution system operations challenges and consideration regarding how new and flexible technologies can supplement distribution grid reliability.

Petra applauds the More Than Smart Working Group efforts that are focused on providing a snapshot of the best places to locate resources on the distribution system. However more is needed for integrating renewable resources consistent with a resilient distribution grid. The CPUC should consider an additional mechanisms that afford participation of diverse, flexible and systems of resources. Less flexible resources will be greatly benefitted from firming and other reliability services on the distribution system. Because there are billions of resources at and behind the "distribution edge", barriers to entry should be low and traditional thinking about load shedding and "deliverability" requirements should be transformed. The distribution grid will benefit greatly from resources that can provide flexible energy management with diagnostics

functions, volt/var support, and short-term grid reserves. Customers should not be required to deliver these services on a 7280-hour basis in order qualify as a capable resource when there are many hours that the resources are not needed. Similar to the wholesale markets, resources should be able to participate when they can and be paid for the value that their capabilities create. With these flexible resources incorporated, integrating distributed energy resources can be more reliable, less locationally restrictive and less costly. Just as the transmission system is benefitted from a construct that allows flexible short-term balancing and firming from resources, the distribution system could likewise benefit as traditional planning processes are limited in their ability to predict and incorporate changes on the distribution system.

Distribution Operations should be expanded to more easily incorporate distributed energy resources and provide transparent and dynamic signals so flexible customer resources can be leveraged. Metering and measurement should be practical and low-cost, leveraging best practices and best available technologies, to utilize these important flexible resources. The distribution system is even more dynamic than the transmission system. While the CPUC should adopt best practices from wholesale restructuring they need to go further. A best-case outcome allows billions of diverse and distributed resources to be readily leveraged. Barriers to entry should be kept low to allow all capable resources to participate in providing distribution grid resiliency services. Onerous and sometimes unnecessary deliverability requirements and traditional generation-based metering requirements will thwart the Commission's goals of engaging preferred resources to firm renewable energy and lower emissions.

The Commission is at an important crossroads where traditional practices can be supplemented with new thinking about distribution grid planning and operations. Just as the transmission system is being used in unpredicted ways, so is the experience of the distribution grid. Providing a dual track Distribution Planning methodology to also examine how Distribution Operations can incorporate flexible energy resources by providing transparent resiliency signal to best integrate distributed energy resources will afford the Commission the opportunity to achieve their goals while simultaneously creating economic value for all distributed resources. Relying on the capabilities of the flexible resources can help to integrate even more distributed resources and

help reduce cross-subsidies. It affords customers an unprecedented opportunity to determine their own value of lost load while forwarding California's Clean Energy Future.

Respectfully,

Dated October 6, 2014 at South Plainfield, NJ

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